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(54) Title: METHOD AND PLANT FOR THE HEAT TREATMENT OF SOLIDS CONTAINING IRON OXIDE

(57) Abstract: A method for the heat treatment of solids containing iron oxide, in which fine-grained solids are heated to a temperature of about 630°C in a fluidized-bed reactor (1). To improve the utilization of energy, it is proposed to introduce a first gas or gas mixture from below through a supply tube (3) into a mixing chamber (7) of the reactor (1), the gas supply tube (3) being at least partly surrounded by a stationary annular fluidized bed (10) which is fluidized by supplying fluidizing gas. The gas velocities of the first gas or gas mixture and of the fluidizing gas for the annular fluidized bed (10) are adjusted such that the Particle-Froude-Numbers in the gas supply tube (3) are between 1 and 100, in the annular fluidized bed (10) between 0.02 and 2, and in the mixing chamber (7) between 0.3 and 30.

WO 2004/057044 A2